

1350.0 - Australian Economic Indicators, 1996

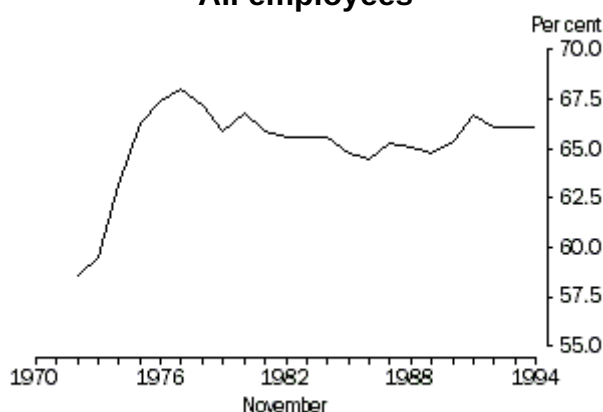
ARCHIVED ISSUE Released at 11:30 AM (CANBERRA TIME) 05/04/1996

Feature Article - Trends in the Female-Male Earnings Ratio

Introduction

In November 1994, female average weekly earnings were approximately two-thirds of male average weekly earnings (Graph 1). The ratio of female to male average weekly earnings rose substantially during the early to mid 1970s, following the introduction of equal pay legislation. However, since that period, there have been only small fluctuations in the female-male earnings ratio. A significant part of the gap between female and male average weekly earnings can be explained by differences in the working arrangements of female and male employees.

GRAPH 1: RATIO OF FEMALE TO MALE AVERAGE WEEKLY EARNINGS
All employees



Source: Cat. no. 6302.0

Main Findings

In August 1994, the female-male earnings ratio was 67.0 per cent. Among the major influences on the gap between female and male average weekly earnings were:

- The higher proportion of female employees working part time compared to male employees. Once an adjustment was made for this difference, the female-male earnings ratio in August 1994 rose substantially to 83.7 per cent.
- The lower average number of hours worked by female employees compared to male employees. Once an adjustment was made for this difference, the female-male earnings ratio in August 1994 rose further to 91.3 per cent.
- The concentration of female employees in lower paying occupations. Once an adjustment was made for differences in the occupational distribution of female and male employees, the ratio of the female-male earnings per hour worked in August 1994 rose slightly to 92.9 per cent.

Between August 1975 and August 1994, the female-male earnings ratio closed by 1.2 percentage points. Among the major influences on the lack of change in the gap between female and male average weekly earnings were:

- The greater rise in the proportion of female employees working part time compared to male employees. After adjusting for changes in the proportion of female and male employees working part time, the rise in the female-male earnings ratio was much greater, rising 8.3 percentage points between August 1975 and August 1994.
- The fall in the average number of hours worked by female employees compared to the rise in the average number of hours worked by male employees. After adjusting for changes in the average number of hours worked by female and male employees, the rise in the female-male earnings ratio was also much greater, rising 8.1 percentage points between August 1975 and August 1994.

Part-time Employees

In August 1994, there was a substantially higher proportion of female employees working part time (41.5 per cent) than male employees (10.7 per cent) (Table 1). This difference has a major influence on the lower average weekly earnings of female employees, and consequently on the ratio of female-male average weekly earnings (the actual average weekly earnings ratio).

TABLE 1. EMPLOYMENT STRUCTURE AND ACTUAL AVERAGE WEEKLY EARNINGS RATIO: EMPLOYEES, AUGUST 1994

	Employment Structure		Actual Average Weekly Earnings		
	Females	Males	Females	Males	Ratio
	- per cent -		- dollars -		- per cent -
Full-time employees	58.5	89.3	527.10	656.40	80.3
Part-time employees	41.5	10.7	238.60	202.80	117.7
All employees	100.0	100.0	407.30	608.00	67.0

Source: The Labour Force, Australia (cat. no. 6203.0) and Weekly Earnings of Employees, Australia (cat. no. 6310.0)

To assess the effect of differences in the proportion of female and male employees working part time, an adjusted average weekly earnings ratio can be calculated by weighting the full-time and part-time average weekly earnings for female and male employees according to the proportions of all employees in full-time and part-time employment. In August 1994, the adjusted average weekly earnings ratio was 83.7 per cent (Table 2), which was 16.7 percentage points higher than the actual average weekly earnings ratio (67.0 per cent).

TABLE 2. ADJUSTED AVERAGE WEEKLY EARNINGS RATIO(a): EMPLOYEES, AUGUST 1994

	Overall employment structure	Adjusted Average Weekly Earnings		
		Females	Males	Ratio
	- per cent -	- dollars -		- per cent -
Full-time employees	75.6	527.10	656.40	80.3
Part-time employees	24.4	238.60	202.80	117.7

All employees	100.0	456.80	545.80	83.7
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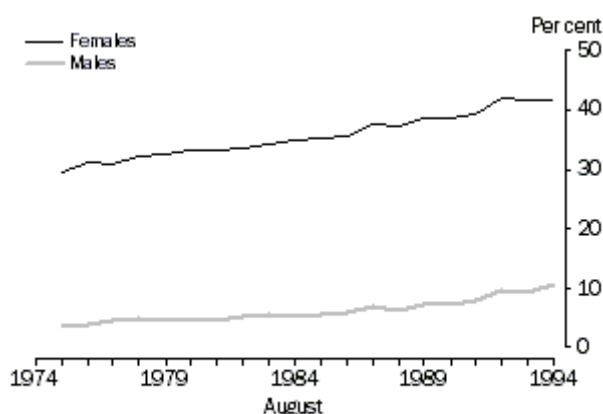
(a) Female and male average weekly earnings are adjusted to eliminate differences in the distribution of female and male employees between full-time and part-time employment.

Source: The Labour Force, Australia (cat. no. 6203.0) and Weekly Earnings of Employees, Australia (cat. no. 6310.0)

Trends in Part-time Employment

In recent decades, there has been a substantial rise in the proportion of both female and male employees working part time. Between August 1975 and August 1994, the proportion of female employees working part time increased 12.1 percentage points (from 29.4 per cent to 41.5 per cent), while the proportion of male employees working part time increased only 7.1 percentage points (from 3.6 per cent to 10.7 per cent) (Graph 2).

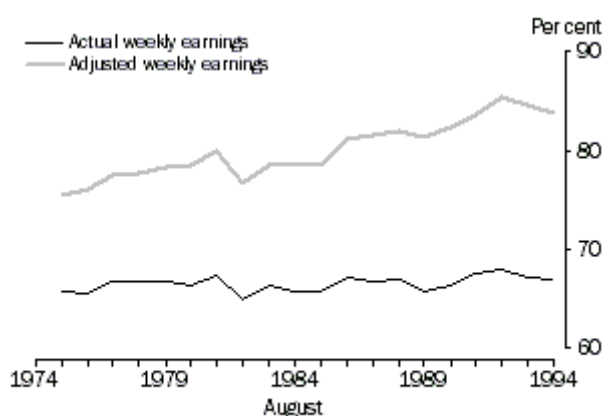
GRAPH 2: PERCENTAGE OF EMPLOYEES WORKING PART TIME



Source: Cat. nos. 6203.0 and 6310.0

This greater rise in the proportion of female employees working part time has exerted a downward effect on the female-male earnings ratio. Between August 1975 and August 1994, the adjusted average weekly earnings ratio rose 8.3 percentage points (from 75.4 per cent to 83.7 per cent), while the actual average weekly earnings ratio rose only 1.2 percentage points (from 65.8 per cent to 67.0 per cent) (Graph 3).

GRAPH 3: ACTUAL AND ADJUSTED AVERAGE WEEKLY EARNINGS RATIO: WAGE AND SALARY EARNERS



Source: Cat. nos. 6203.0 and 6310.0

Average Hours Worked

Further insight into the gap between female and male average weekly earnings can be gained by exploring differences in the average number of hours worked by female and male employees. In August 1994, female employees worked on average 29.6 hours per week, compared with an average of 40.3 hours for male employees. While this difference was due in part to the higher proportion of female employees working part time, it was also due to full-time male employees working more hours on average (43.1 hours) than full-time female employees (38.5 hours).

To assess the effect of differences in the average number of hours worked by female and male employees, an actual average hourly earnings ratio can be calculated. In August 1994, the actual average hourly earnings ratio was 91.3 per cent (Table 3), which was 24.3 percentage points higher than the actual average weekly earnings ratio (67.0 per cent).

TABLE 3. AVERAGE WEEKLY HOURS WORKED AND ACTUAL AVERAGE HOURLY EARNINGS RATIO: EMPLOYEES, AUGUST 1994

	Average weekly hours worked		Actual average hourly earnings		Ratio
	Females	Males	Females	Males	
	- hours -		- dollars -		- per cent -
Full-time employees	38.5	43.1	13.7	15.2	89.8
Part-time employees	16.7	15.4	14.3	13.1	108.5
All employees	29.6	40.3	13.8	15.1	91.3

Source: The Labour Force, Australia (cat. no. 6203.0) and Weekly Earnings of Employees, Australia (cat. no. 6310.0)

For full-time employees, the actual average hourly earnings ratio (89.8 per cent) was higher than the actual average weekly earnings ratio (80.3 per cent), while for part-time employees, the actual average hourly earnings ratio (108.5 per cent) was lower than the actual average weekly earnings ratio (117.7 per cent). This reflects the influence of the lower average number of hours worked by females in full-time employment, and the higher average number of hours worked by females in part-time employment.

Trends in Hours Worked

While the proportions of both female and male employees working part time have risen over recent decades, the average number of hours worked per week has also risen for both full-time and part-time female and male employees (Table 4). This rise was greatest for male employees working full-time. The fall in the average number of hours worked by all female employees reflects the large rise in the proportion of female employees working part time.

TABLE 4. PERCENTAGE CHANGE IN AVERAGE WEEKLY HOURS WORKED: EMPLOYEES, AUGUST 1975 AND AUGUST 1994

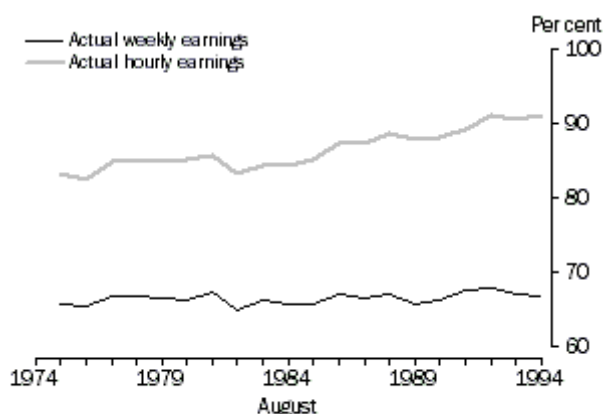
Average Weekly Hours Worked					
August 1975		August 1994		Percentage change	
Females	Males	Females	Males	Females	Males

	- hours -		- hours -		- per cent -	
Full-time employees	36.4	39.3	38.5	43.1	5.8	9.6
Part-time employees	16	14.6	16.7	15.4	4.6	5.8
All employees	30.4	38.5	29.6	40.3	-2.8	4.7

Source: The Labour Force, Australia (cat. no. 6203.0)

The fall in the average number of hours worked by female employees compared to the rise in the number of hours worked by male employees has exerted a downward effect on the female-male earnings ratio. Between August 1975 and August 1994, the actual average hourly earnings ratio rose 8.1 percentage points (from 83.2 per cent to 91.3 per cent), while the actual average weekly earnings ratio rose only 1.2 percentage points (Graph 4)

GRAPH 4: ACTUAL AVERAGE WEEKLY EARNINGS RATIOS: EMPLOYEES



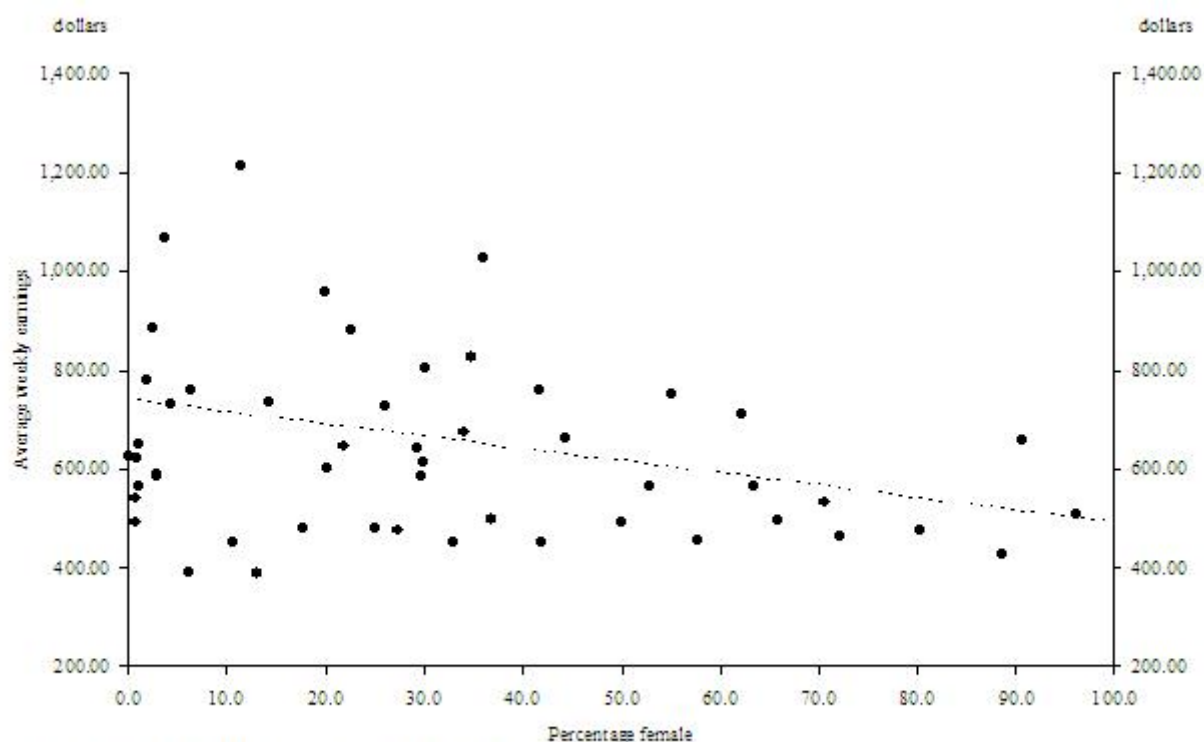
Source: Cat. nos. 6203.0 and 6310.0.

Occupational Segregation

A major difference in the composition of the female and male workforces is the tendency for female employees to be concentrated in a small number of "traditional female" occupations, while male employees tend to be more evenly spread across occupations. However, the "traditional female" occupations are not necessarily the lowest paying female occupations. In fact, some of the "traditional male" occupations have the lowest female average weekly earnings. In August 1994, more than half of all female employees were concentrated in eight (of fifty-two) minor occupation groups; Sales Assistants (11.1 per cent), Numerical clerks (9.7 per cent), Stenographers and typists (7.4 per cent), School teachers (6.0 per cent), Receptionists, telephonists and messengers (5.8 per cent), Registered nurses (4.7 per cent), Tellers, cashiers and ticket salespersons (4.7 per cent), and Personal service workers (4.7 per cent).

The difference in the occupational distribution of female and male employees is called occupational segregation. The actual average weekly earnings ratio is influenced by both the amount of occupational segregation and the variation in average weekly earnings across occupations. In August 1994, a negative relationship existed between the average weekly earnings of all employees in the minor occupation groups and the proportion of employees within these groups who were females (i.e. female employees tended to be over-represented in lower paying minor occupation groups) (Graph 5).

GRAPH 5: RELATIONSHIP BETWEEN AVERAGE WEEKLY EARNINGS AND PERCENTAGE FEMALE(a) WITHIN MINOR OCCUPATION GROUPS, AUGUST 1994



(a) Percentage of employees within minor occupation groups who were female.
Source: The Labour Force, Australia (6203.0) and Weekly Earnings of Employees (6310.0)

To assess the effect of differences in the occupational distribution of female and male employees, an occupation-adjusted average weekly earnings ratio can be calculated by giving female and male average weekly earnings equal weights within each minor occupation group. The weight for each minor occupation group is equal to the number of employees in that group expressed as a percentage of the total number of employees. In August 1994, the occupation-adjusted average weekly earnings ratio was 74.0 per cent (Table 5), which was 7.0 percentage points higher than the actual average weekly earnings ratio (67.0 per cent).

TABLE 5. ACTUAL AND OCCUPATION-ADJUSTED AVERAGE WEEKLY EARNINGS RATIOS(a): MAJOR OCCUPATION GROUPS, EMPLOYEES, AUGUST 1994

Major occupation groups	Actual average weekly earnings			Occupation-adjusted average weekly earnings		
	Females	Males	Ratio	Females	Males	Ratio
	- dollars -		- per cent -	- dollars -		- per cent -
Managers and administrators	626.90	850.50	73.9	639.40	843.40	75.8
Professionals	599.90	827.80	72.5	620.20	811.70	76.4
Para-professionals	522.70	693.40	75.4	536.20	676.80	79.2
Tradespersons	349.70	547.60	63.9	415.00	541.40	76.7
Clerks	425.90	591.30	72.0	426.00	579.90	73.5
Salespersons and personal service workers	287.80	484.10	59.5	307.90	438.26	70.3
Plant and machine operators, and drivers	367.40	591.00	62.2	380.30	585.00	65.0
Labourers and related workers	278.70	419.10	66.5	296.10	409.20	72.3

All Occupations	407.30	608.00	67.0	432.00	583.90	74.0
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(a) Female and male average weekly earnings are adjusted to eliminate differences in the distribution of female and male employees across minor occupation groups.

Source: The Labour Force, Australia (cat. no. 6203.0)

While the occupation-adjusted average weekly earnings ratio was greater than the actual average weekly earnings ratio for all major occupation groups, the magnitude of the difference was greatest for Tradespersons (12.8 percentage points) and Salespersons and personal service workers (10.8 percentage points). These figures reflect the higher concentrations of female employees in lower paying minor occupation groups within these two major occupation groups.

However, the lower average weekly earnings in some of these minor occupation groups are due to the lower average number of hours worked by employees within these groups. The combined influence of differences in the occupational distribution of female and male employees and differences in the average number of hours worked by female and male employees can be assessed by calculating an occupation-adjusted average hourly earnings ratio, derived by giving female and male average hourly earnings equal weights within each minor occupation group. The weight for each minor occupation group is equal to the aggregate number of hours worked by employees in that group expressed as a percentage of total number of hours worked by all employees. In August 1994, the occupation-adjusted average hourly earnings ratio was 92.9 per cent (Table 6), which was only 1.6 percentage points higher than the actual average hourly earnings ratio (91.3 per cent).

TABLE 6. ACTUAL AND OCCUPATION-ADJUSTED AVERAGE HOURLY EARNINGS RATIOS(a): MAJOR OCCUPATION GROUPS, EMPLOYEES, AUGUST 1994

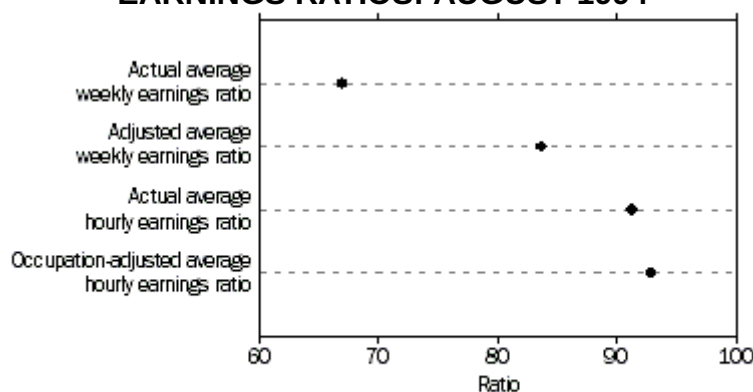
Major occupation groups	Actual average hourly earnings			Occupation-adjusted average hourly earnings		
	Females	Males	Ratio	Females	Males	Ratio
	- dollars -		- per cent -	- dollars -		- per cent -
Managers and administrators	15.30	17.00	89.8	15.30	16.90	90.3
Professionals	17.40	19.10	90.8	17.80	18.90	94.1
Para-professionals	17.40	17.80	98.0	17.60	18.00	97.6
Tradespersons	10.80	13.50	79.9	13.70	13.40	102.1
Clerks	13.60	15.80	86.1	13.50	15.60	86.8
Salespersons and personal service workers	11.70	13.20	89.0	12.10	12.80	95.0
Plant and machine operators, and drivers	11.20	14.10	79.8	12.10	14.00	86.4
Labourers and related workers	11.40	12.30	92.6	11.20	12.30	91.3
All Occupations	13.80	15.10	91.3	14.00	15.10	92.9

(a) Female and male average hourly earnings are adjusted to eliminate differences in the distribution of the number of hours worked by female and male employees across minor occupation groups.

Conclusion

The results of the analysis indicate that a significant part of the gap between female and male average weekly earnings can be explained by the higher proportion of female employees working part time and the lower average number of hours worked by female full-time employees (Graph 6). While female employees also tend to be concentrated in lower paying occupations than male employees, only a small part of the gap between female and male average hourly earnings can be explained by differences in the occupational distribution of female and male employees. This supports previous findings suggesting that most of the gap between female and male average hourly earnings is attributable to female employees occupying lower level positions than male employees within individual occupation groups, rather than differences in the distribution of female and male employees between these groups (Rimmer, 1991).

GRAPH 6: SUMMARY OF FEMALE-MALE AVERAGE WEEKLY AND AVERAGE HOURLY EARNINGS RATIOS: AUGUST 1994



Source: The Labour Force, Australia (cat. no. 6203.0) and Weekly Earnings of Employees, Australia (6310.0)

Furthermore, the lack of change in the gap between female and male average weekly earnings over the last two decades can be explained by the fall in average hours worked by female employees (mainly due to the increasing proportion of female employees working part time) compared to the rise in average hours worked by male employees (despite the increasing proportion of male employees working part time).

For further information about this article please contact The Director, Labour Market Statistics, (02) 6252 7795.

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This page last updated 8 January 2010

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